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LAM, VINH TANG				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/563,192

**Applicant(s)**

STROMBERG, ROLF

**Examiner**

VINH T. LAM

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5, 7-9, 16 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 10-15, 17-18, and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim **17** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation of Claim **17** "...at least a portion of the joint is **situated over** one of the stiffening strips ..." is not clear.

What does "...**situated over**..." mean?

Does "...**situated over**..." mean that the stiffening strips **are connected** to the "rectangular strips of flexible support material" or

does it mean that rectangular strips of flexible support material being **on top** of the stiffening strips?

To further advance prosecution, the Examiner interprets "...**situated over**..." as **connected**.

Appropriate correction is required.

2. Claim **17** recites the limitation "**the joint**" in "at least a portion of **the joint** is situated over one of the stiffening strips". There is insufficient antecedent basis for this limitation in the claim.

To further advance prosecution, the Examiner interprets "...**the joint** ..." as a "rectangular strip of flexible support material".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **1-3, 11-15, 17, and 20** are rejected under 35 U.S.C. 102(b) as being anticipated by **Oberg (US Patent No. 5270690)**.

Regarding Claim **1**, (currently amended) **Oberg** teaches a loop means for pointing devices for guiding a cursor on a computer screen or the like, comprising:

a flexible support material (i.e. rotatable belts or bands **18**, Col. **3**, Ln. **53-54**, FIGs. **3-5**; i.e. flexible wires **58**, Col. **6**, Ln. **43**, FIGs. **13-14**) in the form of a cylinder (i.e. **oblong-shaped**, Col. **3**, Ln. **55**, FIG. **5**) having a longitudinal axis (Col. **4**, Ln. **48-51**, FIG. **5**) and capable of being axially moved (Col. **3**, Ln. **66-68**, Col. **4**, Ln. **1**, FIG. **5**) and circumferentially rotated (Col. **3**, Ln. **66-68**, Col. **4**, Ln. **1**, FIG. **5**) around two axially oriented supports (i.e. belt segments **56**, Col. **3**, Ln. **63-66**, FIG. **4**) for stretching a cross-section of the loop to an oval shape (i.e. **oblong-shaped**, Col. **3**, Ln. **51-59**, FIG. **5**),

said flexible support material having a number of mutually circumferentially spaced stiffening strips or equivalent means substantially parallel to the longitudinal axis for stiffening the loop means in its axial direction (i.e. belt segments **56**, Col. **3**, Ln. **43**, FIGs. **13-14**), said stiffening strips or equivalent means each having a circumferential width, and said stiffening strips or equivalent means having an axial length, greater than the circumferential widths of a plurality of stiffening strips or equivalent means (FIG. **13**); and

a friction material on an external surface of the flexible support material (Col. **6**, Ln. **65-68**, FIG. **16**), said friction material having a significantly varying thickness at different places measured outwards from the external surface of the flexible support material (i.e. **truncated pyramid**, Col. **6**, Ln. **51-52**, FIGs. **15-17**).

Regarding Claim **2**, (currently amended) **Oberg** teaches the loop means according to claim 1, wherein longitudinal zones (i.e. **gaps** exposed **58** between belt segments **56**, FIG. **13**) defined by and between the strips have friction material, and the friction material within the longitudinal zones is less than an average concentration of the friction material on the external surface of the flexible support material (Col. **6**, Ln. **24-27**, Ln. **36-39**, Ln. **46-47**, Ln. **65-68**, FIGs. **10-16**).

Regarding Claim **3**, (currently amended) **Oberg** teaches the loop means according to claim 1, wherein the friction material is arranged substantially in the form of friction strips above the stiffening strips (Col. **6**, Ln. **58-68**, FIG. **16**).

Regarding Claim 11, (new) **Oberg** teaches the loop means according to claim 1, wherein the stiffening strips or equivalent means includes stiffening strips (i.e. belt segments 56, Col. 3, Ln. 43, FIGs. 13-14).

Regarding Claim 12, (new) **Oberg** teaches the loop means according to claim 11, wherein the stiffening strips are provided on a side of the flexible support material opposite the friction material (i.e. belt segments 56, Col. 3, Ln. 43, FIGs. 13-14).

Regarding Claim 13, (new) **Oberg** teaches the loop means according to claim 11, wherein the axial length of the stiffening strips is considerably greater than the circumferential width of the stiffening strips (FIG. 13).

Regarding Claim 14, (new) **Oberg** teaches the loop means according to claim 11, wherein longitudinal zones defined by and between the strips have friction material, and the friction material within the longitudinal zones is less than an average concentration of the friction material on the external surface of the flexible support material (Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16).

Regarding Claim 15, (new) **Oberg** teaches the loop means according to claim 11, wherein the friction material is arranged substantially in the form of friction strips aligned with the stiffening strips (Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16).

Regarding Claim 17, (new) **Oberg** teaches the loop means according to claim 11, wherein the flexible support material is formed by a substantially rectangular strip of flexible support material joined together to form a cylinder, and at least a portion

of the joint is situated over one of the stiffening strips (Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16).

Regarding Claim 20, (new) **Oberg** teaches the loop means according to claim 1, wherein the friction material is coated on the external surface of the flexible support material (Col. 6, Ln. 65-68, FIG. 16).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Oberg** (US Patent No. 5270690) in view of **Crawford** (US Patent No. RE40324).

Regarding Claim 6, (currently amended) **Oberg** teaches the loop means according to claim 1.

However, **Oberg** does not teach that the support material consists of fabric.

In the same field of endeavor, **Crawford** teaches that the support material consisting of fabric (Col. 3, Ln. 26).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine **Oberg** teaching of loop means comprising flexible support material and friction material strips with **Crawford** teaching of the support material consisting of fabric *in order to* provide comfort and flexibility for user.

5. Claims **10** and **18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Oberg (US Patent No. 5270690)** in view of **Hu (US Patent No. 6586720)**.

Regarding Claims **10** and **18**, (currently amended and new) **Oberg** teaches the loop means according to claims 1 and 11 respectively.

However, **Oberg** does not teach that the friction material containing small reflecting particles that are separated sufficiently to give rise to individual light points on the detector chip of an optical detector such as a HDNS 2000 or the like.

In the same field of endeavor, **Hu** teaches the friction material containing small reflecting particles that are separated sufficiently to give rise to individual light points (Col. 3, Ln. 12-24, FIGs. 4-5) on the detector chip of an optical detector such as a HDNS 2000 or the like (i.e. obvious Design Choice).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine **Oberg** teaching of loop means comprising flexible support material and friction material strips with **Hu** teaching of the friction material containing small reflecting particles that are separated sufficiently to give rise to individual light points on the detector chip of an optical detector *for the benefit of* providing the accuracy and reliability of the pointing device.



***Response to Arguments***

6. Applicant's arguments, see Page(s) 6 filed 03/23/2009, with respect to Drawing Objection have been fully considered and are persuasive. The Objection of Drawing has been withdrawn.

7. Applicant's arguments, see Page(s) 6-7 filed 03/23/2009, with respect to 35 U.S.C. §102 and §103 have been fully considered and are **NOT** persuasive.

Applicant argues that *"there simply is no reason for the skilled person to modify the belt of Oberg so as to arrive at the subject matter of claim 1, whether taken alone or in combination with the teachings of the other references"*. However, the Examiner respectfully disagrees because **Oberg** teaches each and every aspect of Claim 1 and other dependent claims *regardless of additional differences*.

8. Newly submitted Claims **16** and **19** are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: *"The friction material is arranged essentially in the form of friction islands above the strips"* and *"the support material's individual threads are arranged at an angle of at least 20 and at most 70 degrees to the stiffening strips"*, respectively.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claims **16** and **19** are withdrawn from

consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

9. Claims **4, 5, 7-9, 16, and 19** are withdrawn.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **VINH T. LAM** whose telephone number is (571)270-3704. The examiner can normally be reached on **M-F (7:00-4:30) EST**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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